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# Does Auditing Quality Mitigate Investors' Overpriced Behaviour? Evidence from The Chinese A-Share Market

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Chao Ge†  
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## Abstract

One of the most significant empirical findings of the auditing literature is that high auditing quality affects investor sentiment towards asset prices. Auditing quality includes auditor reputation and accounting information. Prior studies (e.g., Baker & Wurgler, 2006) document that the shares of certain firms that are inherently difficult to value are more affected by shifts in investor sentiment. Using a sample of 58,476 observations from the Chinese a-share market over the 2009-2014 period, this study examines whether auditing quality mitigates the impact of investor sentiment on mispricing behaviour. The empirical results demonstrate that sentiment-related mispricing is in fact diminished in firms with auditor reputation. Investors pay a lower price for the difficult-to-value firms. By contrast, accounting information fails to mitigate the impact of investor sentiment on mispricing behaviour. The shares of difficult-to-value firms remain to be overpaid by investors. This study uses different proxy variables for auditor reputation and financial information. The results of this study demonstrate that the financial information of auditing quality fails to effectively correct the mispricing behaviour. On the contrary, the reputation of auditing quality correct the mispricing effectively by the signal transmission. The reputation signal of top 4 international accounting firms is slightly stronger than top 10 Chinese accounting firms.

**Keywords:** auditing quality, investor sentiment, market pricing, information asymmetry.

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## I. INTRODUCTION

Behavioural finance theory illustrates that the over-demand of irrational investors results in mispricing in the share market. Previous studies (e.g., Baker & Wurgler, 2006; Cornell et al., 2014; and Zhang & Chen, 2014) reveal that investor sentiment has a great impact on asset prices. The Chinese share market developed less than three decades ago. Bull markets alternate with bear markets with much higher volatility in the Chinese share market. This market turbulence might result from irrational investors. Zhang et al. (2014) find that 46.56 percent of Chinese individual investors have investing experience of less than one year and that only 47.80 percent have financial knowledge.

The explanation provided by Baker and Wurgler (2006) is that investors tend to invest in the shares of cross-sectional features such as small shares, young shares, high-

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volatility shares, unprofitable shares, non-dividend-paying shares, extreme growth shares, and distressed shares. Their empirical results indicate that the higher the beginning-of-period proxies for investor sentiment, the lower the subsequent returns. In particular, Baker and Wurgler (2006) find that the shares of certain firms that are difficult to value are more sensitive to a swing in demand, i.e., investor sentiment. Investor sentiment plays a crucial role in the cross-section of share prices, realised returns or expected returns. Therefore, investor sentiment has a significant impact on share market pricing. Jiang and Wang (2010) find consistent evidence in the Chinese share market. Cornell et al. (2014) utilise principal component analysis to construct a hard-to-value index that proxies for the share pricing difficulty.

The Chinese a-share market is an emerging economy with a unique investing and governance environment. A variety of governance mechanisms, such as auditors, have been introduced into the Chinese share market from developed countries to prevent minority investors from experiencing economic losses. The previous research indicates that the auditor quality involves two different dimensions: reputation and the quality of financial information (Chen et al., 2009). The signal of auditing quality should transmit information to investors. This study aims to investigate whether the auditing quality as a traditional governance mechanism mitigates the information asymmetry between investors and firms. The traditional theory of signal demonstrates that the high-quality auditors can be as the information mechanism which distinguishes different firms effectively. The investors can identify the excellent firms. The firms employing the high-quality transmission of auditing signal also attain the lower agency cost. Jensen and Meckling (1976) argue that the high-quality auditors as a third-party which is neutral can reduce the problem of information asymmetry between the principal and the entrusting parties effectively by the way of transmitting signal. The high-quality auditors are then able to alleviate the problem of agency cost between the principal and the agent.

Moreover, Chow (1982) finds that the firms with higher agency costs voluntarily employ high-quality auditors to reduce the agency cost. Beatty (1989) documents that due to the information asymmetry, the shareholders seem not to appear the wealth transfer which caused by the low share price. The firms hire the auditors with good reputation to transmit the signal for the problem of the investors' information uncertainty before investing. The firms can gain the increase of the capital rights by the increase of the share price. Zhou (2010) finds that the action of auditing financial reports voluntarily by the Chinese listed firms is the action of transmitting the signal to the capital market. The firms with a better medium-term performance tend to choose this kind of signal and transmit to the shareholders. Such behavior appears to aim at obtaining the trust of creditors and debtors to reduce the information asymmetry or releasing signals to regulators to obtain the possibility of issuing security or refunding.

This study utilizes the signal theory of auditing to explore the different dimensions of whether the auditing quality signals can restrain effectively investors' demand for the share which is difficult to pricing in Chinese share market. The auditing quality transmitted to investors mitigates the information asymmetry between the investors and firms. The investors more rely on the auditor's signals rather than merely rely on own emotion to determine their demand for shares. Therefore, the investors with the disadvantage of information are able to make a good pricing decision according to the great auditing signal. However, most investors are in possession of poor financial information and highly rely on personal emotions to subjectively evaluate share prices. Hard-to-value shares (i.e. the valuations are more subjective) are more affected by shifts in investor sentiment. As a result, the more information asymmetry

there is, the more subjectively overpriced behaviour results from investor sentiment.

High auditing quality provides high quality financial information and acts as a positive signal to the share market. Chen et al. (2009) note that auditing quality includes two dimensions: the auditing quality of the market perception and the implicit auditing quality. The former means the auditor's reputation, whereas the latter refers to the "supervision strength" and the "information quality" of auditors. Fair auditing performances are viewed as a signal that mitigates the information asymmetry between investors and firms. Aboody et al. (2005) report that the poor quality of financial reporting increases the likelihood of misvaluation. Accordingly, the influences of investor sentiment on hard-to-value share pricing can be mitigated by the good reputation of auditors and the implicit auditing quality.

An important issue is whether the good reputation of auditors provides high-quality accounting information. Using a sample of 58,476 observations during the period 2009-2014, this study aims to investigate whether the high quality of auditing mitigates the mispricing behaviour in the Chinese share market. The empirical results indicate that the two dimensions of auditing quality fail to effectively mitigate mispricing behaviour. This finding is consistent with only the auditing quality of the market perception (reputation quality) effectively correcting mispricing behaviour for hard-to-value shares, whereas the implicit auditing quality (financial information quality) fails to work. Investors are more likely to be influenced by the brand of auditing firms than by financial information.

The remainder of the paper is organised as follows. In the following section, an overview of auditing quality and prior research into accounting for investor sentiment are introduced. Then, hypotheses are developed in the third section. In Section 4, the research design is described, including the various measures of auditing quality and the control variables used in the analyses. Section 5 provides some preliminary descriptive results and sets out the main results of the analysis regarding auditing quality and the influence of investor sentiment on the share market response to earning news, together with the robustness tests. Finally, the conclusions are presented in Section 6.

## **II. LITERATURE REVIEW**

### **2.1. Auditing Quality**

Auditing quality consists of the market perception and the implicit auditing quality. (Chen et al., 2009). Auditors with a good reputation are more likely to provide high quality financial information for litigation risks and reputation costs (Deangelo, 1981). Lin and Wang (2013) indicate that auditing firms with a higher reputation take higher risks and litigation costs. Guo and Huang (2015) find similar results.

Nevertheless, prior literature of China suggests that the two dimensions of auditing quality are inconsistent and may be opposite (Guo, 2011). These inconsistencies is caused by the fact that the auditor's two signals are inconsistent or caused by the absence of the widespread irrational investors in Chinese capital markets. Although auditing reputation and financial information are reflected in auditing quality, their focus is different. The dimension of reputation is the market sensing which is being focused and is formed by the evaluation mechanism of market reputation. The dimension of financial information is the information product which is provided by the auditors and focusing on the quality of information implied by auditors. The reputation of the auditing quality and financial information appear not to be the same. The absence for the consideration of investors' emotion or investors' irrationality also leads to deviations.

The prior research mainly focuses on the consistency between two auditing quality dimensions. The basic assumption of the signal theory effectiveness is that the receivers of the signal can comprehend the meaning of signal effectively or whether the investors can understand the financial information audited by the auditors and distinguish the difference of the different auditing firms' auditing quality. Considering that Chinese capital market is developing earlier, the investors are short of financial knowledge and other objective reality factors. The research on whether the different dimensions of auditing signal cause difference in the Chinese capital market is significant. The auditing quality and the reputation dimension's measurements of the top 4 and non-top 4 international auditing firms and the top 10 Chinese auditing firms are consistent. But the financial information quality provided by auditors is diversified. Liu and Liu (2007) regard real auditing quality as both the auditing opinion and the discretionary accruals. Nevertheless, Carcello et al. (2014) critically note that traditional measures of auditing independence (or the auditing quality) appear to have many potential limitations, finding no evidence that non-audit services are associated with auditor independence. The high degree of auditing independence implies high auditing quality. Xu and Hong (2011) indicate that auditing firms with a good reputation tend to have a greater amount of goodwill impairment.

## 2.2. Investor Sentiment

Behavioural finance theory suggests that investor sentiment has a great impact on asset prices. Stein (1996) argues that investor sentiment is a manifestation of irrationality. The irrational psychology of investors causes share prices to be overestimated or underestimated. Baker and Wurgler (2006) define investor sentiment as the propensity for speculation and investigate the impact of investor sentiment on the cross-section of share returns in the Chinese A-share market. Baker and Wurgler (2006) note that arbitrage and investor sentiment result in mispricing in the share market. The high cost of arbitrage causes mispricing for shares with specific characteristics, such as volatility, whereas investor sentiment has an impact on pricing behaviour.

Different investor sentiments lead investors to invest in firms with diverse characteristics, such as newly listed firms, young firms, and high-growth firms. In the study by Baker and Wurgler (2006), the empirical results reveal that high investor sentiment earns a relatively lower subsequent return. When sentiment is high, extreme growth, distressed, unprofitable and low book-to-market ratio shares earn relatively lower returns and vice versa. Paying too much for shares with those specific characteristics causes distortion in resource allocation.

Cornell et al. (2014) investigate whether firms with accounting information that are inherently difficult to value can mitigate sentiment-related mispricing. Their findings suggest that sentiment-related mispricing decreases with the high-quality accounting information of firms. Cornell et al. (2014) conclude that when investor sentiment is high, analysts give more favourable suggestions for firms with specific characteristics such as being more difficult to value, overpriced and negative subsequent abnormal share returns. Zhang and Chen (2014) investigate whether internal control mitigates the impact of investor sentiment on the share market response to earnings news.

However, prior literature appears not to reveal whether auditing qualities remain the signals when there are a great number of irrational investors in stock market.

### III. HYPOTHESIS DEVELOPMENT

High auditing quality is viewed as a signal that prevents investors from experiencing economic losses. Jensen and Meckling (1976) note that there is significant information asymmetry between managers and investors. Motivated by self-interest, managers appear to transfer shareholder wealth to themselves. Chow (1982) and Beatty (1989) imply that investors are able to realise the self-interest of managers and are merely willing to pay a low price for the purchase of bonds and shares, causing both honest and dishonest managers to have the same capital cost. Honest managers choose to hire auditors with a good reputation as a signal for investors to avoid inefficient financing activities because of the higher risk of litigation for high-quality auditors. Accordingly, investors view high-quality auditors as being able to mitigate information asymmetry.

Cornell et al. (2014) and Zhang and Chen (2014) illustrate that information asymmetry causes the impact of investor sentiment on share prices and the earnings response. The greater the information asymmetry is, the more errors in the estimation of the future cash flow. Previous studies (e.g., Cornell et al., 2014) also document that auditors can mitigate information asymmetry. The high reputation of auditors is significantly and positively related to the high quality of financial reports with more accurate disclosures and transparent information. Auditors can help investors correctly evaluate market shares. The signal of auditors with a good reputation is regarded as a reduction in mispricing behaviour and the earnings response. High auditing quality can improve the accounting information quality and provide investors with accurate recognition of share prices.

Chen et al. (2009) note that auditing quality includes two dimensions: the market perception of auditing quality and the implicit auditing quality. The former means the auditors' reputation, whereas the latter refers to the "supervision strength" and the "information quality" by the auditors. High auditing quality contributes to the high quality of the accounting information and the transparent disclosure of information. Fair auditing performances are viewed as a signal that eases the information asymmetry between investors and hard-to-value shares. The influences of investor sentiment on overpaying for hard-to-value shares can be restrained by the good reputation of auditors and the implicit auditing quality.

Although the most of empirical evidence of developed capital market supports the reputation dimension of auditing quality and the dimension of financial information have positive influence on investors' decision-making. But the empirical evidence of Chinese capital market is inconsistent and divided on the question. Li (2004), an earlier researcher on the information transfer effect of auditing reputation, argues that Chinese capital market was ineffective and that firms had no incentive to employ highly reputable auditors. Wang et al. (2008) find that the local state-owned firms are more reluctant to employ the high-quality auditors due to the need for surplus control and the advantages of lower bank financing costs. In recent years the point for the reputation of auditors with a good market role is strongly supported. Wang and Li (2009) and Hu (2011) both find that firms with high agency costs are more willing to reduce the financing costs and improve the value of firms by employing highly reputable auditors.

Chinese capital market is not fully effective. The less individual information of the share price and the more phenomenon of rising and falling with systemic risk. The investors fail fully to recognize financial information (e.g. Chen et al., 1998; Song &

Wen, 2009). The high-quality financial information can reduce information asymmetry and improve investor decision-making efficiency (Cornell et al., 2014). Therefore, the hypotheses are proposed as follows,

**Hypothesis 1:** the auditor reputation can mitigate the impact of investor sentiment on overpricing behaviour for hard-to-value shares.

**Hypothesis 2:** the implicit auditing quality can mitigate the impact of investor sentiment on overpricing behaviour for hard-to-value shares.

#### IV. RESEARCH DESIGN

The tests are based on the empirical framework of Cornell et al. (2014) and Zhang and Chen (2014). To test the hypotheses, this study utilises the following regression model:

$$RET_{i,t+1} = \alpha_0 + \alpha_1 SENT_t + \alpha_2 HTV_{i,t} + \alpha_3 AQ_{i,t} + \alpha_4 SENT_t * HTV_{i,t} + \alpha_5 SENT_t * AQ_{i,t} + \alpha_6 HTV_{i,t} * AQ_{i,t} + \alpha_7 SENT_t * HTV_{i,t} + \epsilon_{i,t}$$

where RET denotes the leading monthly abnormal share return, i.e., the leading monthly return less the current mean return for shares matched with the Fama-French three factors. SENT is the investor sentiment index. Baker and Wurgler (2006) adopt principal component analysis for six proxies: the closed-end fund discount rate, the market turnover rate, the number of IPOs, the IPO first-day return, the proportion of equity in long-term capital and the dividend premium. Yao et al. (2015) argues that the closed-end fund discount rate, IPOs, share turnover and IPO first-day return are suitable proxies for the measurement of investor sentiment in the Chinese share market. Jiang and Wang (2010) use the closed-end fund discount rate, IPOs, market turnover rate, number of IPOs and IPO first-day returns to measure the investor sentiment index. Zhang and Chen (2014) note that the number of IPOs and the IPO first-day returns are largely influenced by government policies and do not fully reflect invest sentiment. Accordingly, this study utilises the closed-end fund discount rate, IPOs, and the market turnover rate to construct the investor sentiment index. This study also chooses monthly proxy data between January 2009 and April 2015.

Based on Jiang and Wang (2010), this study estimates the first principal component of three proxies and lags, standardises six proxies and uses principal component analysis for analysis. Second, this study weights the principal component to obtain the first-stage index. The first-stage index consists of six loadings. This study then computes the correlation between the first-stage index and the six original proxies. The most relative three proxies are chosen from the six. Finally, this study employs each of the three proxies to regress the macro-economic climate index: the early warning index, the industrial added value for the price index and the preserve for each of the residuals. Each of the residuals for the three proxies are utilised again for principal component analysis. Consequently, the higher the value of the index is, the higher the investor sentiment.

AQ indicates auditing quality. Auditing quality is the signal for both the reputation of auditors and the accounting information. The study employs different proxies for auditing quality. BIG and BIG4 are proxy variables for high reputation. BIG is 1 if the auditing firm is a Big 4 auditing firm or a top 10 Chinese auditing firm; otherwise, BIG is 0. BIG4 is 1 if the auditing firm is a Big 4 auditing firm, otherwise 0. OPP, DA and IMP are proxies for high-quality accounting information. OPP is 1 if auditors do not give a 'clear' opinion and otherwise 0. DA is 1 divided by the absolute of discretionary accruals. The absolute of discretionary accruals is estimated as the cross-sectional by each year and each industry. IMP is the natural logarithm of 1 plus

the number of goodwill impairments. The higher the value of high-quality accounting information is, the higher the auditing quality.

HTV denotes the hard-to-value index, measured as special shares that are difficult to value and easily influenced by investor sentiment. The hard-to-value index consists of ten proxy variables: the market value of equity, the time from being a listed company to the present, the share volatility, profitability, the tangible assets ratio, the R & D expenditure ratio, the growth index, external financing, the percent of sale growth and the equity dividend. The higher the hard-to-value index, the more difficult to value and price for investors.

Following Jiang and Wang (2009), this study evaluates hard-to-value shares and auditing quality from the beginning of May in the first year to the end of April in next year. This study uses data on either the SHSE (Shanghai Stock Exchange) or the SZSE (Shenzhen Stock Exchange) for the 2009-2014 period. R & D expenditure is obtained from the CCER database. The reputation data are collected from the CICPA official website. The three Fama-French factors are obtained from the RESSET database. Firms in the finance and insurance industry are deleted because of the special accounting treatment and business scope of this sector. The failure to carefully screen the data (the dependent variable and independent variables) could impose considerable biases and lessen the validity of the research. All continuous variables are winsorised at the level of 1 percent, leaving a sample of 58,476 observations.

## V. RESULT

### 5.1. Descriptive Statistics

Table 1 reports the descriptive statistics for the various variables in the sample. The sample consists of 58476 observations over the 2009-2014 period. All continuous variables are winsorised at the level of 1 percent and 99 percent of distribution for the mitigation of outliers. The dependent variable, cumulative abnormal returns, RET, is from 22.123 to -26.833. The mean and median for RET are -0.588 and -1.257, respectively. The investor sentiment index, SNET, ranges from -0.737 to 7.415. The mean and median for SENT are 0.818 and -0.408, respectively. The independent variable, goodwill impairment, IMP, is from 0 to 16.323. The mean and median for BIG4, OPP and IMP are close to 0, indicating that most samples are of low quality. However, the mean and median for BIG are 0.669 and 1, suggesting that almost 70 percent of firms are either audited by Big 4 firms or the top 10 Chinese auditing firms. The distribution of DA shows that the majority of firms have a small value of DA (P50=0.168 and Min=0.002). Only a minority of firms have a very large value of DA (Max=420.803 and Mean=16.168).

**Table 1**

#### **Descriptive Statistics**

<b>Variables</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>P50</b>	<b>S.D.</b>	<b>N</b>
<b>RET</b>	22.123	-26.833	-0.588	-1.257	11.299	58476
<b>HTV</b>	21.841	17.737	19.773	19.678	1.010	58476
<b>SENT</b>	7.415	-0.737	0.818	-0.408	2.538	58476
<b>BIG</b>	1.000	0	0.669	1.000	0.470	58476
<b>BIG4</b>	1.000	0	0.050	0	0.218	58476
<b>OPP</b>	1.000	0	0.004	0	0.070	58476
<b>IMP</b>	16.324	0	0.692	0	3.144	58476
<b>DA</b>	420.803	0.002	16.168	0.168	56.610	58476

All variables as previously defined.

## 5.2. Multivariate analysis

This study employs different proxies for auditing quality. All the empirical tests adopt the ordinary least squares OLS regression, and the standard deviation is corrected by white heteroscedasticity test, which makes the result steadier. The predecessors, Baker and Wurgler (2006), and Cornell et al. (2014)'s literatures shows that if SENT\*HTV is significantly negative, it shows that the higher investors sentiment the more inclined to buy the hard-pricing stocks, resulting in a loss of the late return. Therefore, if the auditing quality signal can effectively be accepted and understood by investors, then investors pricing will be more rational, not easily is affected by the subjective emotion, the degree of mispricing will be greatly reduced, in the columns C of each table, the coefficient of the three multiplicative terms SENT\*HTV\*AQ is significantly positive and significant. Whether the coefficient of the SENT\*HTV\*AQ is positive and significant is the focus of this article.

### 5.2.1. Reputation Tests

The CIAPA is the professional association and supervision department for Chinese auditing firms. The association annually publishes the ranking information for evaluating the service of auditing firms in China. The information is relatively reliable for evaluating the reputation of auditing firms. The top 10 Chinese auditing firms and international auditing firms (i.e., Big 4 firms) are regarded as high reputation firms (variable, BIG). The results are presented in the column A of Table 2. Additionally, prior studies (e.g., Lin & Wang, 2013; Guo & Huang, 2015) illustrate that international auditing firms with a higher reputation are more likely to provide higher information quality. Only the international auditing firms (i.e., Big 4 firms) are viewed as high reputation firms (variable, BIG4). The results are reported in column B of Table 2.

**Table 2**  
**Reputation Tests**

	AQ=BIG			A (AQ=BIG)			B (AQ=BIG4)			C (AQ =BIG4)		
Variables	Coef.	Sig.	t	Coef.	Sig.	t	Coef.	Sig.	t	Coef.	Sig.	t
SENT	2.727	***	2.73	-1.377	**	-2.29	-1.951	***	-2.74			
HTV	-0.299	***	-3.48	-0.371	***	-7.47	-0.411	***	-6.73			
AQ	2.639		1.27	-218.211		-0.38	-243.755		-0.42			
SENT*HTV	-0.111	**	-2.17	0.097	***	3.14	0.125	***	3.43			
SENT*AQ	-7.570	***	-5.73	-41.570	*	-2.29	-39.482	*	-1.66			
HTV*AQ	-0.115		-1.09	11.891		0.38	13.276		0.42			
SENT*HTV*AQ	0.387	***	5.69	2.100	*	1.86	1.998	*	1.76			
_CONS	4.555	***	2.69	6.204	***	6.32	7.108	***	5.89			
N			56283			56283			37588			
Adj R-squared			1.52%			1.45%			1.47%			

All variables as previously defined. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels, respectively.

This study primarily focuses on the coefficient for the interaction of AQ with SENT\*HTV in equation (1). The coefficient for the interaction of SENT with HTV in the regression is negative and significant both in column A and B of Table 2. The result of SENT\*HTV is negative and significant is consistent with the conclusion of Baker and Wurgler (2006) and Cornell et al. (2014). It shows that in the face of the stock which is hard to pricing, the higher investor sentiment the more demand for these stocks when we are based on sentiment. Therefore, if there is a high- quality of auditing signal that can reduce investors' information asymmetry, investors will be significantly less likely to make mispricing of such stocks when they are based on

sentiment. Thus, the AQ \* SENT \* HTV in the equations (1) should be positive and significant, it shows that AQ really reduce the information asymmetry, improve the efficiency of the investors for the shares of stock and suppresses the mispricing caused by excess demand based on sentiment.

The result in column A of Table 2 shows that the coefficient for the interaction of AQ with SENT\* HTV in equation (1) is positive at 1% level and significant (the regression coefficient is 0.387, the 't' is 5.69). And column B of Table 2 shows that the coefficient for the interaction of AQ with SENT\* HTV in equation (1) is positive at 10% level and significant (the regression coefficient is 2.1, the 't' is 1.86).

These result support the hypothesis of H<sub>1</sub>, which indicates that the auditing reputation signal has a significant effect on correcting investors' mispricing.

### 5.2.2. Financial Information Tests

The results for the tests of H<sub>2</sub> are reported in Table 3. The financial information provided by auditors is reflected as the modified audit opinion (OPP), goodwill impairment (IMP) and absolute value of discretionary accruals (DA). This study employs the modified audit opinion (OPP), goodwill impairment (IMP) and absolute value of discretionary accruals (DA) proxied for auditing quality (AQ) in column A, B and C of Table 3, respectively. The coefficients for the interaction of SENT with HTV in all columns are positive. The coefficient for the interaction of AQ with SENT\*HTV is significantly negative in column B but insignificant in both column A and column C. These results seem to suggest that the information of goodwill impairment results in information asymmetry. Investors pay more for the signal of goodwill impairment. Consistent with prior studies (e.g. Wang, 2014; Dong et al., 2015), the finding indicates that some certain financial information results in information asymmetry.

The above results show that the empirical results reject hypothesis of H<sub>2</sub>. That is, investors may not be able to make rational decisions based on the financial information quality signals provided by the auditor to curb the mispricing caused by excessive demand of HTV shares.

**Table 3**  
**Financial Information Tests**

AQ=OPP	A (AQ=OPP)			B (AQ=IMP)			C(AQ=DA)		
Variables	Coef.	Sig.	t	Coef.	Sig.	t	Coef.	Sig.	t
SENT	-1.758	***	-3.00	-1.844	***	-3.14	-1.538	***	-2.59
HTV	-0.368	***	-7.86	-0.368	***	-7.73	-0.332	***	-6.82
AQ	16.596		1.16	8.296		1.37	0.027		0.23
SENT*HTV	0.116	***	3.89	0.121	***	4.02	0.106	***	3.51
SENT*AQ	1.174		0.26	28.567	***	2.80	-0.090		-0.50
HTV*AQ	-0.894		-1.24	-0.425		-1.38	-0.001		-0.11
SENT*HTV*AQ	-0.062		-0.27	-1.441	***	-2.78	0.005		0.56
_CONS	6.145	***	6.62	6.154	***	6.51	5.305	***	5.50
N			56283			56283			56283
Adj R-squared			1.45%			1.46%			1.59%

All variables as previously defined. \*\*\*, \*\*, and \* represent significance at the 1%, 5%, and 10% levels, respectively.

### 5.3. Additional Tests

The prior literature (e.g., Lin & Wang, 2013; Guo & Huang, 2015) illustrates that international auditing firms have a higher reputation and provide investors with a higher quality of financial information. An issue arising from the above result is whether the higher reputation of international auditing firms leads investors to

correctly invest in hard-to-value shares. This is addressed by the inclusion of only the top 10 Chinese auditing firms or international auditing firms (i.e., Big= 1) as a control, with the results reported in column C of Table 2. The result of Table 2 is consistent, the coefficient of the SENT\*HTV\*AQ is still positive and significant. It says that it still supports hypothesis 1 that the auditing quality signals with high reputation can facilitate rational decision-making by investors and reduce excessive demand for HTV shares.

The coefficient of the SENT\*HTV\*AQ is 2.100 with the t-value of 1.86 positively at the level of 10%. The top 4 international auditing firm is a higher than the top 10 Chinese auditing firm in the international capital market. The higher the reputation of market perception, the stronger the signal transmission. The results support the hypothesis of H<sub>1</sub>.

The regression models used in this study are reasonable. The results imply that to the extent that the R squared for all model adjustments in hypothesis 1 and hypothesis 2 appear to decrease when following the study of Cornell et al. (2014). SENT\*AQ and HTV\*AQ are not included in the model, indicating the variables added in regression model of this paper as the control variables are more reasonable. The results are consistent the main findings in this study when taking into account those variables (some of the control variables mentioned in study of Zhang & Chen (2014)). This finding seems to suggest that the regression model used in this study is reasonable.

## VI. CONCLUSION

One of the most significant empirical findings of the auditing literature is that high auditing quality affects investor sentiment towards asset prices. Auditing quality includes auditor reputation and accounting information. Prior studies (e.g., Baker & Wurgler, 2006) document that the shares of certain firms that are inherently difficult to value are more affected by shifts in investor sentiment. This study uses data on either the SHSE (Shanghai Stock Exchange) or the SZSE (Shenzhen Stock Exchange) for the 2009-2014 period.

The empirical results indicate that auditing information signals and financial signals in capital markets fail to mitigate investor demand for hard-to-value shares based on investor sentiment. However, auditors with a good reputation can mitigate the information asymmetry for hard-to-value shares in capital markets and control excessive demand based on investor sentiment with reasonable pricing. By means of additional tests, this study demonstrates that the reputation signal has a greater influence in regard to international auditing firms than local major auditing firms. Accordingly, investors in the Chinese share market fail to perceive the information quality provided by auditors. Investors are able to make a reasonable judgement for auditor reputation.

One possible explanation is that the investment knowledge and empirical practice of investors in China's capital market are generally less (e.g., Zhang et al., 2014), investors may not be able to correctly identify the significance of each signal, moreover such as auditing opinion or goodwill accounting information itself has a complex signal, may further lead to investors and enterprise information asymmetry (e.g., Wang, 2014; Dong et al., 2015), which in turn leads to investors' inability to make sensible decisions based on financial information. The reputation signal is different, the reputation signal is the market perception, and is a brand resource recognized by the client and the regulator (Chen et al., 2009). So, for the most of investors in asymmetric information, it is easier to rely on an auditor's brand influence (or reputation) than to rely on complex financial information.

The limitation of this article is that there is no further research about it whether caused by the individual investors' lack of knowledge about the professional knowledge and investment practice knowledge of, this is a deficiency.

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